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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,138	10/15/2003	Brian J. Brown	03-167US (202.0080001)	6236

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EXAMINER	
TYSON, MELANIE RUANO	

ART UNIT	PAPER NUMBER
3773	

MAIL DATE	DELIVERY MODE
11/15/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/686,138	BROWN ET AL.	
	Examiner	Art Unit	
	MELANIE TYSON	3773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 September 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9,12-19 and 22-24* is/are pending in the application.

4a) Of the above claim(s) *23 and 24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9,12-19, and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the applicant's amendment received 10 September 2010. The application is not in condition for allowance for the reasons set forth below. Claims 10, 11, 20, and 21 remain cancelled. Claims 23 and 24 remain withdrawn from consideration.

Response to Arguments

Applicant's arguments with respect to the new matter rejection have been fully considered but they are not persuasive. The applicant argues that some descriptions of the RF markers can include embodiments having windings on the outside surface of the structure material. However, it is the examiner's position that such descriptions do not describe the windings being "only on an outside surface." Therefore, the new matter rejection stands.

Applicant's arguments with respect to the rejection of the claims over the cited prior art have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-9, 12-19, and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

application was filed, had possession of the claimed invention. At the time the application was filed, the applicant failed to disclose concentric loops on "only" an outside surface of the structure material as recited in claim 1, or RF markers located "only" on an outside of the peripheral surface of the structure as recited in claim 13. Therefore, such a limitation is considered new matter. In Fig. 1C, the ends of 28 and 30 loop around the side to the rear of the structure and there is no language in the specification referring to an embodiment in which the loops are "only" on an outside surface as recited in the claims. Therefore, such a limitation is considered new matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 2, 4-9, and 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (U.S. Patent No. 5,800,526), Melzer et al. (U.S. Patent No. 6,847,837 B1), and Goicoechea et al. (U.S. Patent No. 6,165,213).

Anderson discloses a stent (see entire document) comprising a tubular structure of structural material that is substantially invisible under MRI visualization (for example, 4, lines 38-40) having multiple cells formed by struts (12) including, but not limited to, first and second cells at a first end of the stent facing opposite directions (thus having orthogonal axes generally perpendicular to each other) and third and fourth cells at a second end of the stent facing opposite directions (thus having orthogonal axes generally perpendicular to each other), and connectors (14) interconnecting the cells (for example, see Figure 4), wherein the stent may include markers to identify its position during deployment (for example, see column 9, lines 52-56). Anderson fails to disclose the markers may include RF markers that form generally concentric loops of conductive material on only an outside surface, or peripheral surface, of the structure to delineate an outer circumference of the cells.

Melzer discloses a medical device (see entire document). Melzer teaches RF markers that form generally concentric loops embedded on only outside surfaces of the structure material of the device having orthogonal axes generally perpendicular to each other (for example, see Figure 5) in order to render such portions visible under MRI and thus make it possible to determine the location of the device (for example, see column 10, lines 8-20). Goicoechea discloses a stent comprising structural material delineating cells (see entire document). Goicoechea teaches marking the structural material at the end of the stent in order to render such portions visible during deployment (for example, see column 10, lines 51-61). It is well within the general knowledge of one having ordinary skill in the art to apply known techniques to a known device ready for

improvement to yield predictable results. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Anderson's structural material with RF markers that form generally concentric loops of conductive material on only an outside surface, or peripheral surface, of the structure such that they delineate the peripheral circumference of the cells having orthogonal axes generally perpendicular to each other. Doing so would provide the advantages described above, thus enabling a precise positioning of the device within a body lumen. Furthermore, one of ordinary skill in the art would have recognized that marking multiple cells of a stent on both ends would render the stent length even more visible, thus enhancing imaging and accuracy of stent placement.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al., Melzer et al., and Goicoechea et al. as applied to claim 1 above, and further view of Doran et al. (U.S. Publication No. 2002/0055770 A1).

Anderson as modified by Melzer and Goicoechea discloses the claimed invention except for the combination of ceramic struts and polymer connectors. Doran discloses a stent (see entire document) comprising cells. Doran teaches the stent and connectors may be made from materials such as ceramics, polymers, and combinations thereof (for example, see paragraph 187). It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the struts of ceramic material and the connectors of a polymer material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of design choice.

Claims 12 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al., Melzer et al., and Goicoechea et al. as applied to claims 1 and 13 above, and further view of Jackson et al. (U.S. Publication No. 2003/0004563).

Anderson as modified by Melzer and Goicoechea discloses the claimed invention except for a magnetic susceptibility marker. Jackson discloses a tubular structure (see entire document). Jackson teaches connecting magnetic susceptibility markers (such as paramagnetic materials; paragraph 16) that are visible under MRI to the tubular structure. It is well within the general knowledge of one having ordinary skill in the art to apply a known technique to a known device ready for improvement to yield predictable results. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct Anderson's modified stent with a magnetic susceptibility marker as taught by Jackson. Doing so would further enable a user to clearly recognize the position of the stent under MRI (for example, see paragraph 16), thus facilitating proper implantation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELANIE TYSON whose e-mail is melanie.tyson@uspto.gov and telephone number is (571) 272-9062. The examiner can normally be reached on Monday through Thursday 8-7 (max flex).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jackie Ho can be reached on (571) 272-4696. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Melanie Tyson/
Examiner, Art Unit 3773
November 9, 2010